

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-23 (canceled)

1           Claim 24.     (original)     A method of providing real time traffic weighted  
2 routes using a navigation system having a route calculation program that uses a map  
3 database that includes road segment records that represent portions of roads in a road  
4 network in a geographic region, comprising the steps of:  
5           receiving a wireless transmission indicating weightings applicable to roads in said  
6 road network;  
7           calculating a solution route between a first location in said geographic region and  
8 a second location in said geographic region, wherein said solution route comprises a list  
9 of road segment records that was obtained by forming at least one search tree formed of a  
10 plurality of gates, wherein each gate represents a physical location on said road network  
11 and an accessible direction relative to said physical location;  
12           identifying to which of said road segments said weightings apply;  
13           incrementing each of said gates in said at least one search tree that corresponds to  
14 a road segment to which one of said weightings applies;  
15           growing a search tree by expanding gates to form successor gates; and  
16           evaluating which of said successor gates to select for further expansion using said  
17 weighted gates.

Claims 25-30 (canceled)

1           Claim 31.     (previously presented)     The method of Claim 24 wherein  
2 each gate identifies an associated road segment by referring to a segment database ID.  
3

1           Claim 32.     (previously presented)     The method of Claim 24 wherein  
2 each gate identifies an associated road segment with a pointer.

1           Claim 33.       (previously presented)       The method of Claim 24 wherein, in  
2 each gate, the accessible direction is reverse from a direction of vehicle travel.  
3

1           Claim 34.       (previously presented)       The method of Claim 24 wherein  
2 each gate also includes a reference to a predecessor gate.  
3

1           Claim 35.       (previously presented)       The method of Claim 24 further  
2 comprising:  
3           after calculating the solution route from the first location to the second location,  
4 augmenting an inbound search tree by adding thereto that portion of the at least one  
5 search tree that formed part of the solution route.  
6

1           Claim 36.       (previously presented)       The method of Claim 35 further  
2 comprising:  
3           maintaining in a memory of the navigation system the inbound search tree as  
4 augmented with that portion of the at least one search tree that formed part of the solution  
5 route.  
6

1           Claim 37.       (previously presented)       The method of Claim 24 further  
2 comprising:  
3           providing a user of the navigation system with guidance for following the solution  
4 route to the second location from a physical location of the navigation system.  
5

1           Claim 38.       (previously presented)       The method of Claim 24 further  
2 comprising:  
3           prompting a user of the navigation system to indicate whether a new route should  
4 be calculated upon detection that the navigation system departed from the solution route.  
5

1           Claim 39.       (previously presented)       The method of Claim 24 wherein the  
2 weighting indicates traffic conditions.  
3

1           Claim 40.       (previously presented)       The method of Claim 24 wherein the  
2   weightings are provided to the navigation system from a traffic monitoring service.

3

          Claims 41-44 (canceled)